

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Sheet 4 of 4	Application Number	
	Filing Date	2003 June 27
	First Named Inventor	Namsoon Jung
	Art Unit	
	Examiner Name	
	Attorney Docket Number	AI-0005-FET

**OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		L. RUI et al., Proc. 14th IEEE Intl. Conf. Automatic Face and Gesture Recognition, pp239-244, 2000	
		A. SCHUBERT, Proc. 14th IEEE Intl Conf. Automatic Face and Gesture Recognition, pp116-121,2000	
		R. SHARMA et al., Proc. IEEE special issue on Multimedia Signal Processing, 86(5):853-869, May1998	
		F. SMERALDI et al., Proc. International Conf. on Image Processing, pp163-167, 1998	
		Q.B. SUN et al., Proc. 3rd IEEE Intl. Conf. on Automatic Face and Gesture Recognition,pp130-135,1998	
		M.H. YANG et al., A survey on face detection methods. IEEE Trans. on PAMI, 2001	
		L. ZHANG et al.,Proc. Conf. Knowledge-Based Intel. Eng. Systems and Allied Tech.,Vol1,pp117-120,2000	
		X. ZHANG et al., Proc. 4th International Conference on Signal Processing, Vol2,pp889-892, 1998	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

## In the United States Patent and Trademark Office

Serial Number: \_\_\_\_\_

Appn. Filed: 2003 June 27

Applicant(s): Namsoon Jung and Rajeev Sharma

Appn. Title: METHOD AND SYSTEM FOR REAL-TIME FACIAL IMAGE ENHANCEMENT

Examiner/GAU: \_\_\_\_\_

Mailed: 2003 June 27, Fri.

At: State College, PA

### Information Disclosure Statement

Commissioner for Patents  
Washington, District of Columbia 20231

Sir:

Attached is a completed Form PTO/SB/08(A&B) and copies of the pertinent parts of the references cited thereon. Following are comments on any non-English-language references pursuant to Rule 98:

None.

Very respectfully,

Applicant(s): *Namsoon Jung*

*Rajeev Sharma*

Enc.: PTO-1449 & References

c/o: *Namsoon Jung & Rajeev Sharma, Applicant Pro Se*

*Advanced Interfaces, Inc.*

*403 South Allen St. Suite 104, State College PA 16803*

Telephone: *814-867-8777*

### Certificate of Mailing

I certify that this correspondence will be deposited with the United States Postal Service as first class mail with proper postage affixed in an envelope addressed to: "Commissioner for Patents, Washington, DC 20231" on the date below.

Date: \_\_\_\_\_

\_\_\_\_\_, Applicant

Substitute for form 1449/PTO

***(Use as many sheets as necessary)***

Sheet	1	of	4
-------	---	----	---

Application Number	
Filing Date	2003 June 27
First Named Inventor	Namsoon Jung
Art Unit	
Examiner Name	
Attorney Docket Number	AI-0005-FET

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	
		Filing Date	2003 June 27
		First Named Inventor	Namsoon Jung
		Art Unit	
		Examiner Name	
Sheet 2	of 4	Attorney Docket Number	AI-0005-FET

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		D. BEYMER, Proceedings IEEE Computer Society Conference on CVPR, pp921-928, 1996	
		V. CHANDRASEKARAN, IEEE Conf. Computational Cybernetics and Simulation, Vol3, pp2022-2027, 1997	
		A.J. COLMENAREZ, et al., Proc. International Conference on Image Processing, Vol1, pp657-661, 1999	
		A.J. COLMENAREZ, et al., Proc. International Conf. on Pattern Recognition, Vol 1, pp222-224, 1998	
		H. DEMIREL et al., Proc. Intl. Conf. Information, Communications and Signal Processing, pp984-988, 1997	
		L. FAN et al., ACM Multimedia 2000, pp295-302, 2000	
		D.O. GORODNICHY et al., Lecture Notes Comp.Sci., Vol1311 (ICIAP'97 Proc.Vol.II), pp332-339, Springer, 1997	
		C.L. HUANG et al, Pattern Recognition, 25(12), pp1435-1444, 1992	
		W. HUANG et al., Proc. 14th International Conf. on Pattern Recognition, Vol1, pp110-113, 1998.	
		K.M. LAM et al., Proc. 14th International Conf. on Signal Processing, Vol2, pp1100-1103, 1998	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	
		Filing Date	2003 June 27
		First Named Inventor	Namsoon Jung
		Art Unit	
		Examiner Name	
Sheet 3	of 4	Attorney Docket Number	AI-0005-FET

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		H.W. LEE et al., Proc. IEEE Intl. Symposium on Industrial Electronics, Vol1, pp254-259, 2001	
		S. LEE et al., Proc. International Conference on Virtual Systems and MultiMedia, 2001	
		C.H. LIN et al., IEEE transactions on image processing, Vol8, no6, pp834-845, June 1999	
		M. LYONS et al., Proceedings of ACM Multimedia 98, pp427-434, 1998	
		B. MOGHADDAM et al., Proc. International Conf. on Image Processing, Vol3, pp512-515, 1995	
		H. MOON et al., Proc. International Conf. on Image Processing, Vol3, pp885-888, 2000	
		T. NGUYEN et al., Proc. International Symposium on Computer Vision, pp593-598, 1995	
		R. PINTO-ELIAS et al., Proc. 14th International Conf. on Pattern Recognition, Vol2, pp1360-1364, 1998	
		D. REISFELD et al., 11th International Conf. on Pattern Recognition, Vol1, pp117-120, 1992	
		M. RIZON et al., Proc. Intl. Conf. Intel. Systems and Tech. for the Next Millennium, Vol2, pp415-420, 2000	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.